

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
21 December 2000 (21.12.2000)

PCT

(10) International Publication Number  
WO 00/78085 A1(51) International Patent Classification<sup>7</sup>: H04Q 7/38

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(21) International Application Number: PCT/US99/13459

(22) International Filing Date: 15 June 1999 (15.06.1999)

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(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (national): AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW.

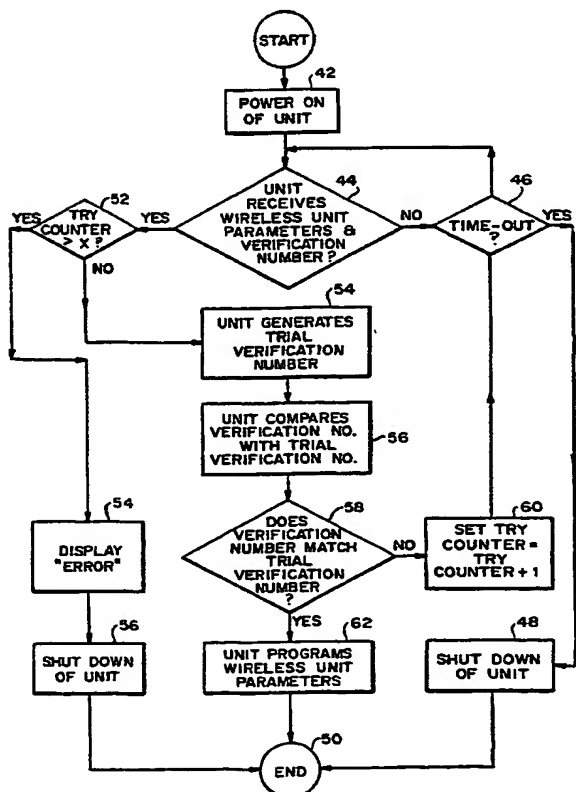
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(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: METHODS AND APPARATUS FOR OVER-THE-AIR PROGRAMMING OF A WIRELESS UNIT



(57) Abstract: Methods and apparatus for secure over-the-air (OTA) programming, and particularly, activation, of a wireless unit in a particular communications system. The unit stores a stored key having been generated by using a key algorithm (K-algorithm) with an identifier associated with the unit as an input to the K-algorithm. The unit may receive information such as parameters and a verification number from a communications system for the purpose of programming the unit. The verification number is generated by using an authorization algorithm (A-algorithm) having the parameters and a key as A-algorithm inputs. The key is generated by the K-algorithm having the identifier associated with the unit as K-algorithm input. In response to receipt of the parameters and the verification number, the wireless unit generates a trial verification number by using the A-algorithm with the parameters and the stored key as trial inputs. The unit compares the verification number to the trial verification number for a match. When finding the match, the unit uses the parameters for programming of the unit in the particular communications system. When failing to find the match, the unit fails to use the parameters for the programming.



**Published:**

— With international search report.

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